



Immunization Assistance Program
Management of Vaccine Related Anaphylaxis

Definition:

Anaphylaxis: Anaphylaxis is a sudden and severe allergic reaction that occurs within minutes of exposure. It is a rapidly evolving, multisystem process involving the integumentary, pulmonary, gastrointestinal, and cardiovascular systems. Anaphylaxis and angioedema are serious disorders that can lead to fatal airway obstruction resulting in hypoxemia and/or shock, and will lead to cardiopulmonary arrest¹.

Immediate medical attention is needed for this condition.

Policy:

All patients being vaccinated will be observed for adverse vaccine reactions for 15 minutes.

All patients receiving COVID – 19 will be observed and monitored for a minimum of 15 minutes for a reaction to the vaccine. If the patient has a history of allergies, the patient will be observed and monitored for 30 minutes.

Procedure:

If itching and swelling are confined to the injection site where the vaccination was given, observe patient closely for the development of generalized symptoms.

If sudden and severe allergic reaction is observed, activate the emergency medical system (EMS; e.g., call 911). Rapid treatment for anaphylaxis is crucial, with ongoing assessment of airway, breathing, circulation, and level of consciousness of the patient. Vital signs should be monitored continuously.

Steps to rapid care for anaphylaxis:

1. Call 911.

Direct secondary nurse or OA to call 911. Follow the specific facility process for contacting EMS and process for escorting the paramedics to the patient.

2. Evaluate patient's responsiveness, airway breathing and circulation.

Begin CPR if indicated. (Constricted airways may hinder rescue breathing but if there is no spontaneous breathing, continue with chest compressions- CAB- at least 100 compressions / minute.)

3. Administer Epinephrine, if signs and symptoms of anaphylaxis:

Administer Epinephrine intramuscularly into the anterolateral aspect of the thigh, through the clothing, if necessary. DO NOT INJECT IN THE BUTTOCKS.

Weight based dosing	
66 pounds and over:	
Administer <i>EpiPen</i> ®: Single dose 0.3 mg or 0.3 mL epinephrine injection, USP 1:1000	May repeat: 10-15 minutes after the initial dose if the patient is not stable. Use weight parameters.
33 pounds to 66 pounds:	
Administer <i>EpiPen Jr</i> ®: Single dose Under 33 pounds 0.15 mg or 0.15 mL epinephrine injection, USP 1:1000	May repeat: 10-15 minutes after the initial dose if the patient is not stable. Use weight parameters.
Under 33 pounds:	
Children (20-33 pounds)	
Administer Epinephrine 0.15 mL intramuscular of the 1:1000 (1 mL= 1 mg) ampule using a TB syringe	May repeat: 10-20 minutes after the initial dose if the patient is not stable. Use weight parameters.
Infants (under 20 pounds)	
Administer Epinephrine 0.10 mL intramuscular of the 1:1000 (1 mL= 1 mg) ampule using a TB syringe	May repeat: 10-20 minutes after the initial dose if the patient is not stable. Use weight parameters.

4. Administer Diphenhydramine:

Administer the antihistamine diphenhydramine².

Adults: Diphenhydramine 50 mg intramuscular

Children: Diphenhydramine **1 to 2** mg per kg intramuscular.

5. Ongoing Patient Assessment and VS Monitoring:

Monitor the patient closely until EMS arrives. Perform cardiopulmonary resuscitation (CPR), if necessary, and maintain airway. Keep patient in recumbent position (flat on back) unless he or she is having breathing difficulty. If breathing is difficult, patient's head may be elevated, provided blood pressure is adequate to

prevent loss of consciousness. If blood pressure is low, elevate legs. Monitor blood pressure and pulse every 5 minutes.

6. Position the patient:

If responsive, position patient in semi- fowlers position. If hypotension, position patient supine and elevate the legs.

7. Document:

Record the patient's reaction (e.g., hives, anaphylaxis) to the vaccine, all vital signs, medications administered to the patient, including the time, dosage, response, and the name of the medical personnel who administered the medication, and other relevant clinical information.

8. Report the incident immediately to the Senior Health Program Coordinator (Sr. HPC) and the Vaccine Adverse Event Reporting System (VAERS) at

www.vaers.hhs.gov.

Document the incident on an Incident Report and submit to the Sr. HPC.

References:

1. <https://pubmed.ncbi.nlm.nih.gov/28800865/>
2. [A Practical Guide to Anaphylaxis - American Family Physician \(aafp.org\)](http://aafp.org)
3. <https://www.immunize.org/catg.d/p3082.pdf>

These standing orders for emergency medical treatment of anaphylaxis in adult and pediatric patients during an Immunization Assistance Program Vaccination Clinic are effective immediately and shall remain in effect until rescinded or revised.

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Sacramento County Health Officer

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Date